

REMARKS

The Official Action mailed September 24, 2004, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

An Information Disclosure Statement is submitted herewith and consideration of this Information Disclosure Statement is respectfully requested.

Claims 1-41 were pending in the present application prior to the above amendment. Dependent claims 9-12 and 34-37 have been amended to correct minor matters of form, and new dependent claims 42 and 43 have been added to recite additional protection to which the Applicant is entitled. Accordingly, claims 1-43 are now pending in the present application, of which claims 1-4, 21, 22 and 38 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 6 of the Official Action rejects claims 1-8 and 13-16 as obvious based on the combination of U.S. Patent No. 5,902,688 to Antoniadis et al. and U.S. Patent No. 6,049,167 to Onitsuka et al. The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Each of the independent claims recite evaporating an organic electroluminescence material in an inert gas atmosphere. Antoniadis and Onitsuka, either alone or in combination, do not teach or suggest at least the above-referenced features of the present invention. The Official Action concedes that Antoniadis "does not teach that the vacuum atmosphere should be an inert gas" (page 3, Paper No. 092204) and asserts that Onitsuka "teaches that the layers may be deposited by vacuum evaporation" and "the EL layer forming steps in the presence of an inert gas" (Id.). The Applicant respectfully disagrees and traverses the above assertions in the Official Action.

Contrary to the assertion in the Official Action, Onitsuka fails to teach or suggest evaporating an organic electroluminescence material in an inert gas atmosphere. Although Onitsuka discloses "an inert gas," the use of the inert gas in Onitsuka is for purposes other than evaporating an organic electroluminescence material, *i.e.* the inert gas atmosphere in Onitsuka appears to be used during a process for removing residual water from the atmosphere prior to applying an adhesive to joint portions (column 11, lines 32-39).

Onitsuka appears to teach that a "gastight space D40 is filled with an inert gas" (column 5, lines 66-67), but the gastight space D40 already contains fully formed organic EL multilayer structure D10. Although Figure 5 of Onitsuka appears to show that reference numerals 11 to 15 are working vacuum chambers in which organic EL multilayers are formed by evaporation (column 11, line 56, to column 12, line 38), this

portion of the process does not teach or suggest that organic EL multilayer formation steps are performed in an inert gas atmosphere. Rather, in Onitsuka, it appears that an inert gas atmosphere is only applied when joining a shield member to a substrate with an adhesive (e.g. column 2, lines 60-65, and column 3, lines 47-54).

Specifically, for example, in the method of Onitsuka, "components of the organic EL display device are carried in" to fore-chamber 120 as shown in Figure 4 (column 10, lines 1-2); chambers 110, 120 and 130 are connected to an inert gas source 150 (column 10, lines 10-11); and fore-chamber 120 is heated to "evaporate off" residual water in the components of the organic EL display device (column 10, lines 27-32). A similar series of events is discussed at column 10, line 66, to column 11, line 49. In other words, the components of the EL display device are already formed and the formation of the actual EL display device is not discussed in detail in Onitsuka. Also, the "evaporation" in the method refers to water in the components of the organic EL display device, not the formation of the components of the organic EL display device themselves. Therefore, Antoniadis and Onitsuka, either alone or in combination, do not teach or suggest evaporating an organic electroluminescence material in an inert gas atmosphere.

Since Antoniadis and Onitsuka do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraphs 7-13 of the Official Action reject claims 9-12 and 17-41 as obvious based on the combination of Antoniadis, Onitsuka and one or more of the following: U.S. Patent No. 5,945,967 to Rallison et al., U.S. Patent No. 5,534,314 to Wadley et al., U.S. Patent 6,495,198 to Peng, U.S. Patent No. 6,537,607 to Swanson, U.S. Patent No. 5,921,836 to Nanto et al., and U.S. Patent No. 4,672,265 to Eguchi et al. It is noted that dependent claims 39 and 40 are rejected as obvious based on the combination of Antoniadis, Onitsuka and Peng or Eguchi; however, claims 39 and 40 depend from

independent claim 38, which is rejected as obvious based on the combination of Antoniadis, Onitsuka and Swanson. As such, it appears that the rejection of claims 39 and 40 is improper. In any event, the Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

Please incorporate the arguments above with respect to the deficiencies in Antoniadis and Onitsuka. Rallison, Wadley, Peng, Swanson, Nanto and Eguchi do not cure the deficiencies in Antoniadis and Onitsuka. The Official Action relies on Rallison to allegedly teach EL displays for video camera displays (page 4, Paper No. 092204), on Wadley to allegedly teach evaporation at atmospheric pressure (*Id.*), on Peng to allegedly teach moving a substrate and a source in relation to one another (page 5, *Id.*), on Swanson to allegedly teach moving a substrate and a source in relation to one another and patterning without a mask (pages 5-6, *Id.*), on Nanto to allegedly teach moving an evaporation support (page 6, *Id.*), and on Eguchi to allegedly teach an evaporation cell made of tungsten (page 7, *Id.*). However, Antoniadis, Onitsuka and one or more of Rallison, Wadley, Peng, Swanson, Nanto and Eguchi, either alone or in combination, do not teach or suggest evaporating an organic electroluminescence material in an inert gas atmosphere. Since Antoniadis, Onitsuka and one or more of Rallison, Wadley, Peng, Swanson, Nanto and Eguchi do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraph 14 of the Official Action asserts that the previously filed arguments with respect to claims 34-41 (page 13 of the *Amendment* filed June 23, 2004), "fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out *how* the language of the claims patentably distinguishes them from the references" (pages 7-8, Paper No. 092204, emphasis in original). The Applicant respectfully disagrees. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie*

conclusion of obviousness. In any event, it is respectfully submitted that the arguments presented above are in full accordance with 37 CFR 1.111(b).

New dependent claims 42 and 43 have been added to recite additional protection to which the Applicant is entitled. The features of claims 42 and 43 are supported by the specification at page 7, lines 16-22, for example. For the reasons stated above and already of record, the Applicant respectfully submits that new claims 42 and 43 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,


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